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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,689	05/15/2001	Masanori Ohkawa	122.1337-DIV	8408
21171 7590 12/02/2003				
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
EXAMINER FRETCH, KARL D				
ART UNIT		PAPER NUMBER		
2876				

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,689

Applicant(s)

OHKAWA ET AL.

Examiner

Karl D. Frech

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

1. Applicant's response filed 8/27/03 has been entered. Claims 8,11,12,14,16,18 have been amended.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-19 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh et al 5,762,813 in view of Schonenberg et al 5,689,102. Katoh discloses as seen in figures 1 and 2 and in column 2 lines 19+ a laser light source which is removably mounted on the outside of a scanner housing. The scanner housing has a glass platen 6 which allows for a scanning beam to exit the scanner housing and a return beam to re-enter the housing. There is disclosed a cover 10 (column 3 line 42 – column 4 line 25) that protects the laser light module mounting aperture from the elements when the laser light module is not attached to the scanner housing. Katoh discloses the laser light source is a semiconductor laser (12) that is contained in a case 20 while being mounted to a circuit board 18. The unit case is connected to the lens barrel 16. There is disclosed a lens 14 for shaping the beam. There is disclosed driving circuitry for driving the laser (col 2 line 43+). The case 20 and connected barrel 16 house the shaping means, laser means, and driving circuitry. There is disclosed an opening for allowing contacts 22 to connect to circuitry external to the case 20/connected barrel 16. Katoh does not specifically disclose the power source, but a power source is inherent, as the circuitry must somehow be powered. Katoh does not specifically disclose that the semiconductor

laser is a laser diode. However, laser diodes are old and well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a laser diode because of their ease of replacement and low cost. Katoh does not specifically disclose that the case 20/lens barrel 16 are insulating. However, insulating housing materials are also old and well known in the art. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use an insulating material to make the case 20/lens barrel 16 in order to avoid accidental shorting of the laser drive circuitry held on the circuit board 18. Katoh does not specifically disclose the plurality of scan lines or the multiple pattern mirrors or the rotating scan mirrors as claimed. Schonenberg discloses, as seen in figure 2 and in the abstract, a scanner housing a rotating polygonal scanning mirror and a plurality of specifically positioned pattern mirrors for creating a multiple scan line scanning pattern outside the scanner housing as the multiple scan lines exit the housing through a glass platen. Schonenberg discloses an internally mounted laser light source. It would have been obvious to a person of ordinary skill in the art at the time of the invention to replace the internally mounted laser light source of Schonenberg with the externally mounted laser light module of Katoh. This would allow for rapid and easy replacement of the laser light source for maintenance purposes. Likewise it would have been obvious to a person of ordinary skill in the art at the time of the invention to use the specific arrangement of Schonenberg in the system of Katoh. This would allow Katoh to effect a multidirectional scan of an object volume.

4. Note: Applicant has provided no specific arguments against the combination of Katoh and Schonenberg in response to the first Office Action rejection. Instead,

applicant has further defined the current invention within the claims. However, as see above, the added elements are either within the Katoh reference or are old and well known in the art. Therefore the rejection is maintained.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

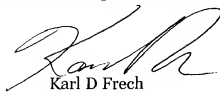
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Frech whose telephone number is (703) 305 3491. The examiner can normally be reached on maxi-flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G Lee can be reached on (703) 305 3503. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

A handwritten signature in black ink, appearing to read 'Karl D Frech', is positioned above the printed name and title.

Karl D Frech
Primary Examiner
Art Unit 2876
